

I CLAIM AS MY INVENTION:

1. A method for dependably transmitting service data from a data center to remotely-located terminal equipment, comprising the steps of:

offering new service data at a data center for future use at terminal equipment;

forming a request for new service data at the terminal equipment;

establishing a first communication between the terminal equipment and the data

center and in said first communication transmitting said request data from

the terminal equipment to the data center, receiving the request data at

the data center, transmitting the new service data requested in the

request data from the data center to the terminal equipment, and

receiving and storing the new service data at the terminal equipment; and

establishing a second communication between the terminal equipment and the

data center and in said second communication forming a message at the

terminal equipment that refers to the new service data stored at the

terminal equipment, communicating said message from the terminal

equipment to the data center, receiving the message from the terminal

equipment at the data center and checking the message at the data

center by comparison of information contained in the message with

information generated from the new service data at the data center and,

given a positive comparison result, transmitting a follow-up message from

the data center to the terminal equipment allowing said terminal

equipment, when appropriate, to use said new service data, and

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registering at the data center the valid transmission of the new service data to the terminal equipment.

2. A method as claimed in claim 1 wherein said follow-up message comprises an OK message allowing the terminal equipment to be switched into an operating mode.

3. A method as claimed in claim 2 wherein the step of transmitting said OK message includes transmitting a marking in said OK message indicating that the new service data stored at the terminal equipment are valid.

4. A method as claimed in claim 1 wherein the step of storing the new service data in the first communication comprises intermediately storing the new service data at the terminal equipment, and wherein the step of transmitting said follow-up message in said second communication comprises transmitting a load instruction from the data center to the terminal equipment, and wherein said second communication includes the step of, upon receipt of said load instruction at the terminal equipment, loading the new service data into a non-volatile memory of a processing module at the terminal equipment.

5. A method as claimed in claim 1 wherein the step of forming said message in the second communication at the terminal equipment comprises forming a message including a version number associated with the new service data and a checksum.

6. A method as claimed in claim 1 wherein the step of forming said message in the second communication at the terminal equipment comprises forming a message including a version number associated with the new service data and an encrypted checksum.

7. A method as claimed in claim 1 wherein the step of offering said new service data comprises offering postage fee schedule table data as said new service data, and comprising the step of providing a postage computer having a processing module which makes use of said postage fee schedule table data at said terminal equipment.

8. A method as claimed in claim 7 wherein the step of forming said message in said second communication at said terminal equipment includes forming a message including a version number of the new service data and an encrypted checksum, and comprising the step of providing a postage meter machine at said terminal equipment in communication with said postage computer, storing a secret key in said postage meter machine, forming said encrypted checksum in said postage meter machine using a symmetrical encryption algorithm and said secret key, and storing said secret key as well at said data center and using said secret key at said data center to check said message from said terminal equipment in said second communication.

9. A method as claimed in claim 7 wherein the step of forming said message in said second communication at said terminal equipment comprises forming a message including a version number of the new service data and an encrypted checksum, and comprising the steps of storing a public key in said postage computer and forming said encrypted checksum in said postage computer using an asymmetrical encryption algorithm and said public key, and storing a non-public secret key, related to said public key, at said data center and using said non-public secret key at said data center to check said message in said second communication.

10. A method as claimed in claim 1 wherein the step of offering new service data at said data center comprises offering new postage fee schedule table data at said data center for future use in postage calculation, and wherein the step of checking the message transmitted from the terminal equipment to the data center in the second communication comprises checking information contained in said message by comparison with information generated from the new postage fee schedule table data, and wherein the step of transmitting said follow-up message in said second communication from said data center to the terminal equipment comprises transmitting an OK message indicating that the new postage fee schedule table data received at said terminal equipment are valid and also including a load instruction instructing the terminal equipment to load the new postage fee schedule table data into a non-volatile memory of a postage computer at said terminal equipment.

11. A method as claimed in claim 10 comprising the additional step of loading said new postage fee schedule table data into said non-volatile memory at said postage computer upon receipt at said terminal equipment of said follow-up message.

12. A method for dependably transmitting service data from a data center to remotely-located terminal equipment, comprising the steps of:

transmitting unencrypted service data from a data center to terminal equipment;
generating a code at the terminal equipment based on the transmitted service data;

transmitting said code from said terminal equipment to said data center; and

receiving said code at said data center and checking said code at said data center and transmitting a message from said data center to said terminal equipment identifying a result of the check.

13. A method as claimed in claim 12 comprising providing a postage computer at said terminal equipment, and wherein the step of transmitting unencrypted service data to the terminal equipment comprises transmitting unencrypted fee schedule table data, as said unencrypted service data, to said postage computer, and comprising the steps of generating a checksum at said postage computer based on the transmitted fee schedule table data and transmitting the checksum to the data center as at least a part of said code, and wherein the step of checking the code at the data center comprises checking the checksum at the data center on the basis of a stored checksum stored at said data center and wherein the step of transmitting a message to the terminal equipment comprises transmitting an OK message to the terminal equipment given coincidence of said stored checksum with the checksum transmitted to the data center.

14. A method as claimed in claim 12 comprising providing a postage computer at said terminal equipment, and wherein the step of transmitting unencrypted service data to the terminal equipment comprises transmitting unencrypted fee schedule table data, as said unencrypted service data, to said postage computer, and comprising the steps of generating a encrypted code at said postage computer based on the transmitted fee schedule table data and transmitting the encrypted code to the data center as at least a part of said code, and wherein the step of checking the code at the data center comprises checking the encrypted code at the data center on the

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basis of a stored encrypted code stored at said data center and wherein the step of transmitting a message to the terminal equipment comprises transmitting an OK message to the terminal equipment given coincidence of said stored encrypted code with the encrypted code transmitted to the data center.

15. A method as claimed in claim 12 comprising providing a postage computer at said terminal equipment and wherein the step of transmitting unencrypted service data to the terminal equipment comprises transmitting unencrypted fee schedule table data, as said unencrypted service data, to said postage computer, and wherein the step of generating a code at the terminal equipment comprises generating a signature representing information dependent on the transmitted fee schedule table data and encrypting said information with a public write key to form said signature, and wherein the step of transmitting said code to the data center comprises transmitting said signature to the data center, and wherein the step of checking the code at the data center comprises decrypting the signature at the data center with a secret read key according to an asymmetrical algorithm and checking the information in the signature with information stored at the data center and, given a positive comparison result, transmitting an OK message to the terminal equipment.

16. A method as claimed in claim 15 comprising the step of forming a checksum as said information contained in said signature.

17. An arrangement for dependably transmitting service data from a data center to remotely-located terminal equipment, comprising:

a data center, and terminal equipment located remote from said data center, said data center offering new service data for future use at said terminal equipment;

means for forming a request for new service data at the terminal equipment;

means for establishing a first communication between the terminal equipment and the data center and in said first communication transmitting said request data from the terminal equipment to the data center, means for receiving the request data at the data center and for transmitting the new service data requested in the request data from the data center to the terminal equipment, and means for receiving and storing the new service data at the terminal equipment; and

means for establishing a second communication between the terminal equipment and the data center and in said second communication forming a message at the terminal equipment that refers to the new service data stored at the terminal equipment and for communicating said message from the terminal equipment to the data center, means for receiving the message from the terminal equipment at the data center and for checking the message at the data center by comparing information contained in the message with information generated from the new service data at the data center and, given a positive comparison result, for forming and transmitting a follow-up message from the data center to the terminal equipment allowing said terminal equipment, when appropriate, to use said new service data, and means for registering at

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the data center the valid transmission of the new service data to the terminal equipment.

18. An arrangement as claimed in claim 17 wherein said means for forming said follow-up message comprises means for forming an OK message allowing the terminal equipment to be switched into an operating mode.

19. An arrangement as claimed in claim 18 wherein said means for forming said OK message means for including a marking in said OK message indicating that the new service data stored at the terminal equipment are valid.

20. An arrangement as claimed in claim 17 wherein said means for storing the new service data in the first communication comprise means for intermediately storing the new service data at the terminal equipment, and wherein said means for transmitting said follow-up message in said second communication comprise means for transmitting a load instruction from the data center to the terminal equipment, and wherein said terminal equipment comprises means for, upon receipt of said load instruction at the terminal equipment, loading the new service data into a non-volatile memory of a processing module at the terminal equipment.

21. An arrangement as claimed in claim 17 wherein said means for forming said message in the second communication at the terminal equipment comprise means for forming a message including a version number associated with the new service data and a checksum.

22. An arrangement as claimed in claim 17 wherein said means for forming said message in the second communication at the terminal equipment comprise means

for forming a message including a version number associated with the new service data and an encrypted checksum.

23. An arrangement as claimed in claim 17 wherein said data center comprises means for offering postage fee schedule table data as said new service data, and wherein said terminal equipment comprises a postage computer having a processing module which makes use of said postage fee schedule table data.

24. An arrangement as claimed in claim 23 wherein said means for forming said message in said second communication at said terminal equipment comprise means for forming a message including a version number of the new service data and an encrypted checksum, and wherein said terminal equipment comprises a postage meter machine in communication with said postage computer, means for storing a secret key in said postage meter machine, means for forming said encrypted checksum in said postage meter machine using a symmetrical encryption algorithm and said secret key, and wherein said data center comprises means for storing said secret key as well at said data center and wherein said means for checking comprise means for using said secret key to check said message from said terminal equipment in said second communication.

25. An arrangement as claimed in claim 23 wherein said means for forming said message in said second communication at said terminal equipment comprise means for forming a message including a version number of the new service data and an encrypted checksum, and wherein said postage computer comprises means for storing a public key and for forming said encrypted checksum using an asymmetrical encryption algorithm and said public key, and wherein said data center comprises

means for storing a non-public secret key, related to said public key, at said data center and wherein said means for checking comprise means for using said non-public secret key to check said message in said second communication.

26. An arrangement as claimed in claim 17 wherein said data center comprises means for offering new postage fee schedule table data at said data center for future use in postage calculation, and wherein said means for checking the message transmitted from the terminal equipment to the data center in the second communication comprises means for checking information contained in said message by comparison with information generated from the new postage fee schedule table data, and wherein said means for transmitting said follow-up message in said second communication from said data center to the terminal equipment comprises means for transmitting an OK message indicating that the new postage fee schedule table data received at said terminal equipment are valid and also including a load instruction instructing the terminal equipment to load the new postage fee schedule table data into a non-volatile memory of a postage computer at said terminal equipment.

27. An arrangement as claimed in claim 26 wherein said terminal equipment comprises loading said new postage fee schedule table data into said non-volatile memory at said postage computer upon receipt at said terminal equipment of said follow-up message.

28. An arrangement for dependably transmitting service data from a data center to remotely-located terminal equipment, comprising:

a data center, and terminal equipment located remote from said data center;

means for transmitting unencrypted service data from the data center to the terminal equipment;

29. An arrangement as claimed in claim 28 wherein said terminal equipment comprises a postage computer, and wherein said means for transmitting unencrypted service data to the terminal equipment comprises means for transmitting unencrypted fee schedule table data, as said unencrypted service data, to said postage computer, and wherein said postage computer comprises means for generating a checksum based on the transmitted fee schedule table data and wherein said means for transmitting said code comprise means for transmitting the checksum to the data center as at least a part of said code, and said means for checking the code at the data center comprise means for checking the checksum at the data center on the basis of a stored checksum stored at said data center and for transmitting a message to the terminal equipment comprising an OK message to the terminal equipment given coincidence of said stored checksum with the checksum transmitted to the data center.

data to the terminal equipment comprises means for transmitting unencrypted fee schedule table data, as said unencrypted service data, to said postage computer, and wherein said postage computer comprises means for generating a encrypted code based on the transmitted fee schedule table data and wherein said means for transmitting said code comprise means for transmitting the encrypted code to the data center as at least a part of said code, and wherein said means for checking the code at the data center comprise means for checking the encrypted code at the data center on the basis of a stored encrypted code stored at said data center and for transmitting a message to the terminal equipment comprising an OK message to the terminal equipment given coincidence of said stored encrypted code with the encrypted code transmitted to the data center.

31. An arrangement as claimed in claim 28 wherein said terminal equipment comprises a postage computer and wherein said means for transmitting unencrypted service data to the terminal equipment comprise means for transmitting unencrypted fee schedule table data, as said unencrypted service data, to said postage computer, and wherein said postage computer comprises said means for generating a code at the terminal equipment, said postage computer generating a signature, as said code, representing information dependent on the transmitted fee schedule table data and encrypting said information with a public write key to form said signature, and wherein said means for transmitting said code to the data center comprises means for transmitting said signature to the data center, and said means for checking the code at the data center comprise means for decrypting the signature at the data center with a secret read key according to an asymmetrical algorithm and for checking the

information in the signature with information stored at the data center and, given a positive comparison result, for transmitting an OK message to the terminal equipment.

32. An arrangement as claimed in claim 31 wherein said postage computer comprises forming a checksum as said information contained in said signature.

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